# Before the FEDERAL COMMUNICATIONS COMMISSION Washington, D.C. 20554

In the Matter of
Policies and Rules
Concerning Toll Fraud

CC Docket No. 93-292

FEB 1 0 1994

OFFICE OF THE SECRET THIS SECRET

#### NYNEX REPLY COMMENTS

NYNEX Corporation ("NYNEX"), on behalf of New York

Telephone Company, New England Telephone and Telegraph Company
and NYNEX Mobile Communications Company, hereby files its Reply
Comments in the above-captioned matter.

#### I. INTRODUCTION

In its Notice of Proposed Rulemaking ("NPRM"), the Commission requested comment on various proposals that it believed would help avoid or reduce the risks of toll fraud. For the most part, the commenting parties do not agree as to whether these proposals should be adopted. In fact, about the only things that the industry does agree on is that toll fraud is a serious problem and that additional legislation to stiffen the penalties for toll fraud is needed.

Some parties favor including toll fraud warnings in tariffs. Others do not. Some parties support mandated

No. of Copies rec'o

See, e.g., NATA Comments, p. 15.

See, e.g., Southwestern Bell Comments, p. 2.

consumer education initiatives.<sup>3</sup> Others do not.<sup>4</sup> Some parties agree that the Commission should establish a federal policy assigning liability for payphone fraud.<sup>5</sup> Many parties do not.<sup>6</sup> While some parties agree that PBX manufacturers should include written warnings with their equipment,<sup>7</sup> there is no agreement as to its efficacy.<sup>8</sup>

Not surprisingly, the principal focus of the comments is on the issue of liability for toll fraud. Here too, no industry consensus is apparent. Some parties support use of a no-fault or strict liability standard. Others support a comparative negligence approach. Payphone providers and PBX owners argue that they should not be liable for fraud under any standard and seek to shift the liability to local exchange carriers (LECs) and interexchange carriers (ICs). LECs and ICs argue that shifting of liability is inappropriate and that PBX owners and payphone providers should be responsible for

See, e.g., AT&T Comments, p. 3.

See, e.g., Southwestern Bell Comments, p. 2.

<sup>5</sup> See, e.g., IPANY Comments, p. 5.

See, e.g., NYNEX Comments, p. 19.

See, e.g., NATA Comments, p. 10.

<sup>8</sup> See, e.g., AT&T Comments, p. 16 n.18.

<sup>9 &</sup>lt;u>See, e.g.</u>, Bell Atlantic Comments, p. 5.

See, e.g., ICA Comments, p. 10.

See, e.g., APCC Comments, p. 19 and the numerous letters sent by PBX owners.

fraud that originates from telecommunications equipment within their custody and control. 12

A number of parties express concern that if liability is not somehow shifted to the LECs, the LECs will have no incentive to take action to prevent fraud. <sup>13</sup> In contrast, the LECs have described in great detail the many efforts that they have undertaken and are undertaking to combat toll fraud. <sup>14</sup> The LECs have expended substantial resources (both in terms of time and money) even though their liability is limited today.

Given the lack of industry consensus on most of the proposals discussed in the NPRM, the Commission must seriously consider whether it is necessary or desirable to promulgate new rules regarding toll fraud, especially with respect to liability for PBX and payphone toll fraud. As NYNEX demonstrated in its Comments, the current liability rules that hold customers financially responsible for calls that originate from PBXs and private payphones within their care and control are based on sound public policy and risk management principles. There has been no showing by any party to this proceeding that changed circumstances warrant a change in the liability rules. Any attempt to shift or cap end user liability for fraud will only create disincentives for

See, e.g., MCI Comments, p. 11; US West Comments, p. 43; Southwestern Bell Comments, p. 6.

<sup>13 &</sup>lt;u>See</u>, <u>e.g.</u>, AT&T Comments, pp. 28-29.

<sup>14</sup> See, e.g., NYNEX Comments, pp. 2-9.

customers to engage in fraud prevention activities.

Furthermore, expanding the liability of LECs for toll fraud will not prevent fraud from occurring. It will only result in increased litigation before the Commission and the Courts, and the potential for increased rates for all ratepayers. This is clearly not in the public interest.

Instead of attempting to develop rules for deciding who is liable for what kind of fraud under which circumstances — a task that is virtually impossible given the increasingly intricate nature of telephony and the number of parties involved in the origination, transport and termination of a given call — the Commission should devote its resources to working with the industry to develop solutions to limit toll fraud.

#### II. PBX FRAUD IS THE RESPONSIBILITY OF THE PBX OWNER

In its Comments, NYNEX urged the Commission to reaffirm its <u>Chartways</u> 15 decision which holds that PBX owners should be primarily responsible for PBX toll fraud. 16 The PBX owner is in the best position to prevent fraud by programming, configuring or disabling the remote access features in the PBX, or by installing adequate security or monitoring procedures. 17 LECs should not be liable for PBX

Chartways Technologies, Inc. v. AT&T Communications, 6 FCC Rcd 2942 (1991), application for review denied, FCC 93-394 (August 19, 1993).

<sup>16 &</sup>lt;u>See NYNEX Comments</u>, p. 17.

<sup>17</sup> See Pacific Bell Comments, p. 11.

fraud since the LECs merely provide access to the network and have no control over the PBX's features and functions.  $^{18}$  Shifting liability from PBX owners to other parties would create disincentives on the part of PBX owners to control fraud.  $^{19}$ 

LECs should not be required, as some parties suggest, to offer network monitoring services for interLATA and international fraud. On In delivering and receiving calls from PBXs, LECs are unable to distinguish legitimate from fraudulent usage. ICs and the PBX owner should have the primary responsibility for monitoring the use of the PBX. They have the information necessary to conduct a timely detailed analysis of PBX calls to determine possible fraudulent usage.

There appears to be little dispute that PBX manufacturers should be required to provide warnings regarding the potential risk of toll fraud associated with use of their equipment. The PBX manufacturers agree that warnings are appropriate. The Commission should therefore adopt its proposed amendments to Part 68 of the Commission's rules.

See Pacific Bell Comments, p. 11; Southwestern Bell Comments, p. 6.

<sup>19</sup> See AT&T Comments, P. 17.

See US West Comments, p. 42; BellSouth Comments, p. 6.

See AT&T Comments, p. 13; NATA Comments, p. 2; Sprint Comments, p. 10. Indeed, it appears that many ICs already offer such services.

See, e.g., Northern Telecom Comments, p. 7.

## III. PAYPHONE FRAUD IS THE RESPONSIBILITY OF PAYPHONE PROVIDERS

In its Comments, NYNEX opposed adoption of the Florida Public Service Commission (PSC) rule which insulates payphone providers from liability for fraudulent calling card, bill to third party and collect calls if they subscribe to Billed Number Screening (BNS) and Originating Line Screening (OLS) services. 23

These services are neither designed nor priced to prevent toll fraud or guarantee revenue collection. Their primary purpose is to (1) alert ICs and operator service providers (OSPs) that calls from these lines require special attention, and (2) assist ICs and OSPs in deciding whether to extend credit, and what type of credit, to callers. NYNEX cannot determine at the time a call is placed whether the call is fraudulent. Even if the call is not fraudulent, NYNEX cannot guarantee that the caller will pay for the call. If NYNEX's OLS and BNS services are to be insurance policies for payphone providers, then the rates for these services must be raised drastically to cover the risk involved and must be borne exclusively by the payphone providers themselves.

The Florida PSC rule has many other infirmities. It would impose strict liability on LECs even for simple errors such as transposing a single number on a service order. 24 It would unfairly allow ICs to recover their lost profits, rather

See NYNEX Comments, p. 20; MCI Comments, p. 2.

<sup>24</sup> See US West Comments, p. 43.

than out-of-pocket costs only. <sup>25</sup> Shifting liability to the LECs could result in increased rates for BNS and OLS services <sup>26</sup> and increased litigation. <sup>27</sup> Finally, as noted in our Comments, the Florida PSC rule would relieve payphone providers from taking numerous other security measures that are available and necessary to combat payphone fraud in addition to ordering BNS and OLS service. <sup>28</sup> This is inconsistent with the Commission's recent <u>United Artists</u> decision. <sup>29</sup>

Several parties argue that it is discriminatory for ICs to hold payphone providers responsible for long distance calls that originate or terminate at private payphones while not doing so for long distance calls that originate or terminate at LEC payphones. These arguments completely ignore a long line of cases in which the Commission has ruled that LEC payphones should be treated differently than private payphones. In Tonka Tools, 32 the Commission explained

See BellSouth Comments, p. 7; Bell Atlantic Comments, p. 3.

See GTE Comments, p. 12; Bell Atlantic Comments, p. 4; Ameritech Comments, p. 4.

<sup>27 &</sup>lt;u>See Bell Atlantic</u>, p. 5.

See NYNEX Comments, p. 20; AT&T Comments, Appendix C.

United Artists Payphone Corp. v. New York Telephone Co. et. al., FCC 93-387 (August 18, 1993).

See, e.g., APCC Comments, p. 7; IPANY Comments, p. 19.

See Amendment of Section 64.702 of the Commission's Rules and Regulations (Second Computer Inquiry), 77 FCC 2d 384, recon., 84 FCC 2d 50 (1980), further recon., 88 FCC 2d 512 (1981), aff'd sub nom., Computer and Communications Industry Ass'n v. FCC, 693 F.2d 198 (D.C. Cir. 1982), second further recon., 56 R.R.2d (P&F) 301 (1984) (hereinafter "Computer II").

why LEC payphones should be treated differently:

"Pay telephones provided by carriers subject to regulation have historically been accorded special regulatory status because they serve the public service role of ensuring pay telephone service is available to the transient, mobile public, and they have as their primary customer or user the general public."

Because private payphone owners have no obligation to serve the public, it is not unreasonable that LEC phones be treated differently than private payphones. 33 LEC payphones are not CPE but part of LEC regulated service. Private payphones, on the other hand, are CPE and calls originating from or accepted at such phones should be billed on the same basis as calls billed to other CPE.

Several parties argue that LECs should use "cuckoo tones" on their payphones to prevent fraudulent international collect calls. <sup>34</sup> However, equipping central offices to provide the "cuckoo tones" is expensive and it would still not prevent foreign telephone company operators from completing the calls. Instead, these tones should be deployed at the switches used by interexchange carriers for overseas calls.

Furthermore, as NYNEX noted in its Comments, <sup>35</sup> foreign

See Petition for Declaratory Ruling of Tonka Tools, Inc., 58 R.R.2d (P&F) 903, 910 (1985) ("Tonka Tools").

The Commission reaffirmed that LEC phones have a different regulatory status than private payphones in its May 8, 1992 Second Report and Order in CC Docket No. 91-35. There, the Commission ruled that private payphones, but not payphones owned by the LECs, are eligible for compensation in the amount of \$6 per payphone per month for originating dial around interstate access code calls.

See, e.g., MCI Comments, p. 10.

<sup>35</sup> See NYNEX Comments, p. 20 n. 21.

telephone companies will have no incentive to validate international incoming collect calls unless the Commission changes the settlements policy for such calls.

Several parties argue that the LECs should assign line numbers for all payphones in the 8000-9999 range where practicable. Most of NYNEX's payphones have line numbers in that range. However, the interexchange or foreign carrier must still query LIDB to determine whether bill to third party and collect calls are permitted for a particular phone number. If no LIDB query is made, the call is likely to be completed.

Several parties argue that COCOTs and inmate phones should be assigned unique Automatic Number Identification (ANI) codes (e.g., ANI 88). In order to do so, LECs would have to deploy Flexible ANI capability in their end offices. NYNEX currently has Flexible ANI capability in DMS-100 end offices. However, ubiquitous deployment of this capability is expensive. Furthermore, each time a new set of ANI codes is agreed upon by the industry, the software tables in all LEC switches must be updated. 37

Several parties argue that international call blocking services should be made available to business customers in addition to payphone providers and call aggregators. As NYNEX noted in its Comments, 39 NYNEX's international call

See e.g., AT&T Comments, p. 27.

<sup>37 &</sup>lt;u>See GTE Comments</u>, p. 25.

<sup>38 &</sup>lt;u>See ICA Comments</u>, p. 4.

<sup>39 &</sup>lt;u>See NYNEX Comments, p. 5.</u>

blocking services are available to Centrex service customers and to business customers with PBXs.

Several parties argue that LEC international call blocking services should also block direct dialed calls to the 809 area code. 40 NYNEX does offer to private payphone providers a service that blocks all direct dialed interLATA calls, including calls to the 809 area code. 41

APCC states that "PIC None" or "No PIC" is only available in a few states. 42 It is available in all states in the NYNEX region except in certain end offices in New York City due to technical reasons. In these offices, payphone providers can select "PIC NYC" which blocks all interLATA calls except to the five counties of northern New Jersey within the "corridor." 43

MCI complains that even if PIC None is available, fraudulent 10XXX 1+ calls can still be completed from private payphones. However, NYNEX offers payphone providers a service which blocks 10XXX 1+ calls.  $^{45}$ 

IPANY complains that on some 800 calls, LECs return unrestricted dial tone to the caller which can then be used by

<sup>40 &</sup>lt;u>See</u> APCC Comments, p. 19.

This service is known as Limited InterLATA Dialing. See NYNEX Comments, p. 5.

<sup>42 &</sup>lt;u>See APCC Comments</u>, p. 13.

See IPANY Comments, p. 2 n.3.

See MCI Comments, p. 10.

<sup>45 &</sup>lt;u>See NYNEX Comments</u>, p. 5.

the caller to make fraudulent calls. 46 The problems experienced by payphone providers on such calls are complex in both their origin and resolution. As NYNEX noted in its Comments, 47 in order to prevent regenerated dial tone at payphones, the Commission should amend Section 68.314 of its rules to extend the requirement for delivery of standardized supervisory signals to and from interexchange carriers and operator service providers. The rules currently apply only to manufacturers of terminal equipment.

#### IV. LEC LIABILITY FOR LIDB FRAUD SHOULD NOT BE EXPANDED

In its Comments, NYNEX opposed the Commission's proposal to expand liability for LIDB fraud. 48 LIDB was not designed to and cannot prevent fraud on all collect, bill to third party and calling card calls. 49 For example, when a customer makes a calling card call, LIDB only determines whether the calling card number is valid. The LEC has no way of knowing whether the person making the call is in fact the authorized card holder. 50 It would be unreasonable to hold the LECs liable for the fraud in this instance.

Liability for calling card fraud should be borne by the carrier that carries the call (i.e., LECs should bear the risk

See IPANY Comments, p. 5.

See NYNEX Comments, p. 22.

See NYNEX Comments, p. 24.

<sup>49 &</sup>lt;u>See</u> Sprint Comments, p. 14.

<sup>50 &</sup>lt;u>See</u> Southwestern Bell Comments, p. 11.

of intraLATA calling card fraud and interexchange carriers should bear the risk of interLATA calling card fraud). <sup>51</sup> Fraud is a cost of doing business that is factored into the surcharge rates that carriers charge on calling card and other operator-assisted calls. <sup>52</sup> If LECs are to assume any liability for LIDB fraud on networks other than their own, <sup>53</sup> they must be afforded an opportunity to increase their rates for the LIDB service. <sup>54</sup>

On the other hand, it is not unreasonable to require ICs, LECs and other telecommunications service providers to validate all calling card, collect and bill to third party calls and not complete any calls where positive validation from LIDB is not received. It is also not unreasonable, as recognized by most carriers, that LECs be provided with the calling and called number whenever LIDB is queried, including collect and bill to third party calls. NYNEX also does not agree that ICs should charge LECs for providing this

<sup>51</sup> See Ameritech Comments, p. 7.

<sup>52 &</sup>lt;u>See</u> BellSouth Comments, p. 13.

As US West points out, it is also difficult to determine whether LIDB has been queried on any particular call. See US West Comments, p. 22.

 <sup>&</sup>lt;u>See</u> GTE Comments, p. 22; Southwestern Bell Comments, p.
 12. There is no reason why LECs should be liable for lost profits. Liability should be limited to reimbursement of out-of-pocket expenses. <u>See</u> BellSouth Comments, p. 13.

See Sprint Comments, p. 18. AT&T seems to suggest that calling and called numbers should be supplied only on calling card calls. See AT&T Comments, pp. 32-33. NYNEX disagrees. The information will help NYNEX detect fraud on bill to third party and collect calls as well.

information. This information is used for the IC's benefit to minimize fraud exposure.  $^{56}$ 

Sprint argues that the LECs should include additional information about their LIDB fraud control procedures in their tariff beyond that required by the Commission in its <u>LIDB</u>

Order. 57 The LECs have fully complied with the <u>LIDB Order's</u> requirements and there is no reason to revisit this issue in this proceeding.

CompTel argues that the Mutual Card Honoring Agreements ("MHAs") between AT&T and several LECs contain limitation of liability provisions significantly different from those contained in the LECs' LIDB tariffs, and that the LECs are thus discriminating in favor of AT&T. These same arguments were raised by CompTel in the LIDB investigation and are beyond the scope of this proceeding. The MHA defines the terms and conditions pursuant to which AT&T and NYNEX bill and collect for each other's calling cards for calls made on the other's networks. It is appropriate in this context for AT&T and NYNEX to set forth the methodology for determining the amount due AT&T for AT&T calls made with a NYNEX calling card that are billed by NYNEX on its portion of the customer's bill. In those instances where AT&T subscribes to LIDB Access Service, it is subject to the same limitation of liability provisions

<sup>56</sup> See BellSouth Comments, p. 12.

See In the Matter of Local Exchange Carrier Line Information Database, 8 FCC Rcd 7130 (1993).

<sup>58</sup> See LIDB Order, 8 FCC Rcd at 7136.

contained in the tariff, as all other LIDB Access Service customers.

#### V. THE COMMISSION CAN HELP CONTROL SUBSCRIPTION FRAUD

In its Comments, NYNEX noted that state regulations often inhibit LECs from disconnecting, on a timely basis, the service of persons believed to be engaged in subscription fraud. In its Comments, Pacific Bell notes that it has been authorized by its state regulatory commission to disconnect service without prior written notice in cases of subscription fraud. The Commission should consider adopting such a regulation and preempt inconsistent state regulations. All carriers, both ICs and LECs, should have the right to terminate service immediately, and without notice, where fraud is suspected. 60

# VI. THE COMMISSION SHOULD TAKE ACTION TO HELP CONTROL CELLULAR FRAUD

In its Comments, NYNEX urged the Commission to enact revisions to Part 22 of the rules to require manufacturers to properly secure the ESN chip and to ensure that only the original manufacturer's installed ESN is transmitted. This proposal was supported by several parties <sup>61</sup> and should be adopted immediately.

<sup>59 &</sup>lt;u>See Pacific Bell Comments</u>, p.6.

<sup>60 &</sup>lt;u>See</u> Sprint Comments, p. 10.

<sup>61</sup> See, e.g., CTIA Comments, p. 6.

Many parties addressed the issue of liability for cellular fraud. AT&T argues that interexchange carriers should not be liable for fraudulent long distance calls from cellular phones since they are unable to detect whether calls are made from telephones using authorized ESN/MIN combinations or from phones which have been fraudulently cloned. NYNEX disagrees. There are several measures that interexchange carriers can take to prevent cellular fraud (e.g., require customers to use credit cards or Personal Identification Numbers ("PINs"), deny 10XXX dialing, etc.). Since the long distance carrier can prevent fraud by validating each call, it should not be immunized from liability for toll fraud.

McCaw Cellular with respect to liability for cellular fraud. 63 Liability should be borne by the carrier that can control the fraud and has a direct relationship with the customer. If the cellular carrier offers equal access to its customer, the long distance losses should be borne by the interexchange carrier and the cellular air time charges should be absorbed by the cellular carrier. Where a cellular carrier resells the services of an interexchange carrier, the two involved carriers can negotiate the allocation of risk of loss due to fraud.

Finally, there is also no merit to AT&T's argument that if cellular carriers are not liable for interexchange toll

<sup>62 &</sup>lt;u>See AT&T Comments</u>, pp. 30-31.

<sup>63 &</sup>lt;u>See CTIA Comments</u>, p. 13; McCaw Cellular Comments, p. 7.

fraud, they will have no incentive to develop technical solutions to control fraud. The cellular industry has a great deal of incentive. Fraud costs the cellular industry an estimated \$300 million per year. <sup>64</sup> The industry is working diligently to develop solutions that will reduce fraud for both cellular carriers and long distance carriers. <sup>65</sup>

#### VII. CONCLUSION

NYNEX applauds the Commission's desire to assist the telecommunications industry in its battle against toll fraud. There are steps that the Commission could take in this regard. However, NYNEX does not support the Commission's proposal to expand the liability of LECs for toll fraud beyond the limits specified in its tariffs. Instead of attempting to develop new liability rules, the Commission should devote its resources to working with the industry to develop solutions to prevent toll fraud from occurring.

Respectfully submitted,

NYNEX Corporation

Edward R. Who!

William J. Balcerski

120 Bloomingdale Road White Plains, NY 10605 (914) 644-2032

Its Attorneys

Dated: February 10, 1994

<sup>64</sup> See CTIA Comments, p. 3 n. 4.

<sup>65</sup> See NYNEX Comments, pp. 6-8.

## CERTIFICATE OF SERVICE

I certify that copies of the foregoing NYNEX'S REPLY COMMENTS, CC Docket No. 93-292, were served on each of the parties listed on the attached Service List, this 10th day of February, 1994, by first class United States mail, postage prepaid.

Lisa M. Lippi

Mark C. Rosenblum Robert J. McKee Richard H. Rubin Room 3254A2 295 North Maple Avenue Basking Ridge, NJ 07920 Attorneys for AT&T

James L. Wurtz 1275 Pennsylvania Avenue, N.W. Washington, D.C. 20004 Attorneys for PACIFIC BELL and NEVADA BELL

M. Robert Sutherland
Richard M. Sbaratta
Helen A. Shockey
675 W. Peachtree Street, N.E.
Atlanta, Georgia 30375
Attorneys for BELLSOUTH
TELECOMMUNICATIONS, INC.

William B. Barfield Jim O. Llewellyn 1155 Peachtree Street, N.E. Suite 1800 Atlanta, Georgia 30367-6000 Attorneys for BELLSOUTH CELLULAR CORPORATION

James D. Ellis
William J. Free
Paula J. Fulks
175 E. Houston, Room 1218
San Antonio, Texas 78205
Attorneys for SOUTHWESTERN BELL
CORPORATION

Robert M. Lynch
Richard C. Hartgrove
Paul Walters
One Bell Center, Room 3520
St. Louis, Missouri 63101
Attorneys for SOUTHWESTERN BELL
TELEPHONE COMPANY

Pamela J. Andrews Room 4H74 2000 West Ameritech Center Drive Hoffman Estates, IL 60196-1025 Attorney for AMERITECH CORP.

John M. Goodman Stephen E. Bozzo 1710 H Street, N.W. Washington, D.C. 20006 Attorneys for BELL ATLANTIC

Douglas F. Brent THE INTEREXCHANGE CARRIER INDUSTRY COMMITTEE TOLL FRAUD SUBCOMMITTEE 9300 Shelbyville Road Suite 7000 Louisville, Kentucky 40222

David J. Gudino GTE SERVICE CORPORATION 1850 M Street, N.W. Suite 1200 Washington, DC 20036 Michael F. Altschul CELLULAR TELECOMMUNICATIONS INDUSTRY ASSOCIATION 1133 21 Street, N.W. Third Floor Washington, D.C. 20036 Craig T. Smith SPRINT CORPORATION P.O. Box 11315 Kansas City, MO. 64112

Brian R. Moir, Esquire 1255 23rd Street, N.W. Suite 800 Washington, DC 20037-1170 Attorney for INTERNATIONAL COMMUNICATIONS ASSOCIATION Mary J. Sisak
Donald J. Elardo
1801 Pennsylvania Avenue N.W.
Washington, D.C. 20006
Attorneys for
MCI TELECOMMUNICATION CORP.

Albert H. Kramer
Robert F. Aldrich
Keck, Mahin & Cate
1201 New York Avenue, N.W.
Penthouse Suite
Washington, D.C. 20005-3919
Attorneys for NORTH AMERICAN
TELECOMMUNICATIONS ASSOC.

Kathryn Marie Krause Suite 700 1020 19th Street, N.W. Washington, D.C. 20036 Attorney for U S WEST COMMUNICATIONS, INC.

Albert H. Kramer
Robert F. Aldrich
Dana J. Lesemann
Keck, Mahin & Cate
1201 New York Avenue, N.W.
Penthouse Suite
Washington, D.C. 20005-3919
Attorneys for AMERICAN PUBLIC
COMMUNICATIONS COUNCIL

Paul C. Besozzi
Besozzi, Gavin & Craven
1901 L Street, N.W.
Suite 200
Washington, D.C. 20036
Attorney for MASSACHUSETTS
PAYPHONE ASSOCIATION

Jay C. Keithley
Michael B. Fingerhut
Norina T. Moy
SPRINT CORPORATION
1850 M St., N.W., Suite 1110
Washington, D.C. 20036

Jeffrey S. Lord Joseph Sullivan FLEX COMMUNICATIONS 4 Wells Street, P.O. Box 267 Johnstown, NY 12095-0267 Randal R. Collett ASSOCIATION OF COLLEGE AND UNIVERSITY TELECOMMUNICATIONS ADMINISTRATORS, INC. 250 W. Main St., Suite 2420 Lexington, KY 40507-1739 Keith Frank
THE UNIVERSITY OF OKLAHOMA
Health Science Center
5310 E. 31st St., Suite 200
Tulsa, Oklahoma 74135-5067

Gary C. Jensen
INTERNATIONAL SL-1 USERS
ASSOCIATION
468 Shannon Square #9
Sulphur Springs, TX 75482

Glen Ellyn Clinic, S.C. 454 Pennsylvania Ave. Glen Ellyn, Ill. 60137

Paul B. Taylor Van Hoy, Reutlinger & Taylor 1001 East Boulevard Charlotte, NC 28203 A. J. Ascone MOBIL CORPORATION 3225 Gallows Road Fairfax, VA 22037-0001

Philip Ahston MID-CONTINENT LIFE INSURANCE CO. P.O. Box 60269 Oklahoma City, OK 73146-0269

Anne U. MacClintock THE SOUTHERN NEW ENGLAND TELECOMMUNICATIONS CORP. 227 Church Street New Haven, CT 06510

Audrey I. Brown MERCY HEALTHCARE INC. 2700 Stewart Parkway Roseburg, Oregon 97470 Michael O'Connell Xiox Corporation 577 Airport Blvd., Suite 700 Burlingame, CA 94010 KDRA-TV2 One Gateway Center Pittsburg, PA. 15222 The Promus Companies Inc. 3180 Players Lane Memphis, TN. 38125

CF Crocker Fels 1900 Section Road Cincinnati, OH. 45237 William J. Hughes
The Union Central Life Insurance
P.O. Box 179
Cincinnati, Ohio 45201

Patti Evans
CHICAGO CONVENTION AND TOURISM
BUREAU, INC.
McCormick Place-on-the-Lake
2301 S. Lake Shore Drive
Chicago, ILL. 60616-1497

Paula Marker STORMONT-VAIL REGIONAL MEDICAL CENTER 1500 S.W. 10th Ave. Topeka, Kansas 66604-1353

Tina Rothrauff Saint Margaret Memorial Hospital 815 Freeport Rd. Pittsburgh, PA 15215

MASCO CORPORATION 21001 Van Born Road Taylor, Michigan 48180

Mary Ellen Myers J. R. SIMPLOT COMPANY 5383 Irving Street Boise, Idaho 83706 Wendy Lucas
POTTSTOWN MEMORIAL MEDICAL
CENTER
1600 East High Street
Pottstown, PA 19464-5008

Alisa Bryn Evans CATERPILLAR INC. 2500 NC 42 East P.O. Box 999 Clayton, N.C. 27520 MATSUSHITA ELECTRIC CORP. 9401 West Grand Ave. Franklin Park, ILL. 60131-3498

Mary Ann Postel ILC DATA DEVICE CORP. 105 Wilbur Place Bohemia, NY 11716-2482 Vicki Alexander
PRIMUS AUTOMOTIVE FINANCIAL
SERVICES, INC.
P.O. Box 111897
Nashville, TN 37222-1897

Jean Conley Cooper Industries Crouse-Hinds Division P.O. Box 4999 Syracuse, NY 13221-4999 C. Bryan Tonet
Blue Shield/Blue Cross
of Rhode Island
444 Westminster St.
Providence, RI 02903-3279

Joyce Amburgey CSE Insurance Group 989 Market St San Francisco, CA 94103-1709 AMERICAN GENERAL FINANCIAL CENTER
P.O. Box 3121
Evansville, IN 47731-3121

Betty Huntsman KUTV INC. P.O. Box 30901 Salt Lake City, Utah 84130 Margaret G. Weitzel WYSE ADVERTISING, INC. 24 Public Square Cleveland, Ohio 44113 Judith Rhein Johnson McKenna & Cuneo 1575 Eye Street, N.W. Washington, D.C. 20005 Wayne V. Black
C. Douglas Jarrett
Michael R. Bennet
Keller and Heckman
1001 G Street, N.W., Suite 500 W.
Washington, DC 20001
Attorneys for THE AMERICAN
PETROLEUM INSTITUTE

RALEIGH TECHNOLOGY GROUP, INC. Suite 207 8601 Six Forks Road Raleigh, NC 27615 Debra L. Lagapa
Levine, Lagapa & Block
1200 Nineteenth Street, N.W.
Suite 602
Washington, D.C. 20036
Attorneys for COMMUNICATIONS
MANAGERS ASSOC., N.Y. CLEARING
HOUSE ASSOC. & SECURITIES
INDUSTRIES ASSOC.

Rosalyn R. Harris Preformed Line Products P.O. Box 91129 Cleveland, Ohio 44101 R. Michael Senkowski
Katherine M. Holden
Wiley, Rein & Fielding
1776 K Street, N.W.
Washington, D.C. 20006
Attorneys for MCCAW CELLULAR
COMMUNICATIONS, INC.

AMERICAN SPEECH-LANGUAGE-HEARING ASSOCIATION 10801 Rockville Pike Rockville, Maryland 20852 Keith J. Roland
Roland, Fogel, Koblenz & Carr
One Columbia Place
Albany, NY 12207
Attorneys for INDEPENDENT
PAYPHONE ASSOC. OF NY

Thomas K. Crowe, Michael G. Jones Irwin Campbell & Crowe 1320 18th Street, N.W., Suite 400 Washington, D.C. 20036 Attorneys for PLANNED PARENTHOOD OF NEW YORK CITY, AND REYNOLDS AND REYNOLDS

Benjamin J. Griffin
Laura Holt Jones
Reed Smith Shaw & McClay
1200 18th Street, N.W.
Washington, D.C. 20036
Attorneys for STATE OF S.C.
OFFICE OF INFORMATION RESOURCE

Joel H. Levy
Cohn and Marks
1333 New Hampshire Ave., N.W.
Suite 600
Washington, D.C. 20036
Attorneys for NATIONAL CELLULAR
RESELLERS ASSOCIATION

Bob F. McCoy, Joseph Miller, Kevin Ward, Shawna L. Barnard Suite 3600 One Williams Center Tulsa, Oklahoma 74172 Attorneys for WILTEL COMMUNICATIONS SYSTEMS

Joe D. Edge
Elizabeth A. Marshall
Hopkins & Sutter
888 Sixteenth St., N.W.
Washington, D.C. 20006
Attorneys for PUERTO RICO
TELEPHONE COMPANY

James Blaszak, Patrick Whittle, Susan H.R. Jones Gardner, Carton & Douglas 1301 K Street, N.W. Suite 900 East Washington, D.C. 20005 Attorneys for AD HOC TELECOM-MUNICATIONS USERS COMMITTEE

J. Manning Lee 1 Teleport Drive, Suite 301 Staten Island, N.Y. 10311 Attorney for TELEPORT COMMUNICATIONS GROUP Charles Hunter
Kelly, Hunter, Mow & Povich
1133 Connecticut Ave., N.W.
Seventh Floor
Washington, D.C. 20036
Attorneys for TELECOMMUNICATIONS
RESELLERS ASSOCIATION

Raymond G. Bender, Jr.
J.G. Harrington
Dow, Lohnes & Albertson
1255 23rd Street,N.W.,
Suite 500
Washington, D.C. 20037
Attorneys for VANGUARD
CELLULAR SYSTEMS, INC.

Steven J. Hogan LINKUSA CORPORATION 230 Second Street, S.E. Suite 400 Cedar Rapids, Iowa 52401

Fred E. Marquis PINELLAS COUNTY FLORIDA 315 Court Street Clearwater, FL 34616 Genevieve Morelli
1140 Connecticut Ave., N.W.
Suite 220
Washington, D.C. 20036
Attorneys for COMPETITIVE
TELECOMMUNICATIONS ASSOC.

John L. Bartlett
Robert J. Butler
Aliza F. Katz
Wiley, Rein & Fielding
1776 K Street, N.W.
Washington, D.C. 20006
Attorneys for AERONAUTICAL
RADIO, INC.

Robert Cook U.S. INTELCO NETWORKS, INC. P.O. Box 2909 Olympia, Washington 98507

Kenneth Hoffman, Floyd Self Messer, Vickers, Caparello, Madsen, Lewis, Goldman & Metz P.O. Box 1876 Tallahassee, FL 32302-1876 Attorneys for FLORIDA PAY TELEPHONE Stephen Satchell P.O. Box 6900 Incline Village, NV 89450

Ed Simonson TELEDESIGN MANAGEMENT 1633 Bayshore Hwy. Suite 120 Burlingame, CA 94010 David C. Jatlow Young & Jatlow 2300 N Street. N.W. Suite 600 Washington, DC 20037 Attorneys for THE ERICSSON CORPORATION

Steven E. Watkins
David Cosson
2626 Pennsylvania Ave., N.W.
Washington, D.C. 20037
Attorneys for NATIONAL TELEPHONE
COOPERATIVE ASSOCIATION

Thomas J. Dunleavy
Susan Miller
75 Park Place
New York, NY 10007
Attorneys for NEW YORK CITY
DEPARTMENT OF
TELECOMMUNICATIONS & ENERGY

Michael J. Shortley, III 180 South Clinton Avenue Rochester, NY 14646 Attorney for ROCHESTER TELEPHONE CORPORATION Stephen L. Goodman
Halprin, Temple & Goodman
1301 K Street, N.W.
Suite 1020, East Tower
Washington, D.C. 20005
Attorney for NORTHERN TELECOM,
INC.